## **ATTACHMENT A**

## LISTING OF CLAIMS WITH MARKINGS TO SHOW CHANGES MADE

Attachment A Listing with Markings

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## I CLAIM:

1. (Currently Amended) An electronic <u>component electronically connected</u> with an external electronic master system comprising:

configurable electronic circuitry means for replicating emulating an output signal from a respective known electronic system sub-component of a known electronic master system, the output signal corresponding to a function of the electronic system sub-component;

an input/output interface for electronically mating the configurable electronic circuit to the electronic master system; and

a configuration controller element electronically connectable with the configurable electronic circuit, the configuration controller <u>determines</u> the location of the configurable electronic circuit in the electronic <u>master system and configures</u> the configurable electronic circuit to <u>replicate emulate</u> a selected function and operational characteristics of the known electronic system sub-component;

wherein the configurable electronic circuit has an output adaptable as an input to the electronic master system to replicate emulate and replace functions of the known electronic system sub-component acting in the electronic master system.

2. (Original) The invention of claim 1 wherein:

the configurable electronic circuit and the input/output interface are mounted with a circuit card assembly.

- 3. (Canceled)
- 4. (Original) The invention of claim 1 further including a processor means external to the configurable electronic circuit to load instructions onto the configurable electronic circuit.

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- 5. (Original) The invention of claim 1 wherein the configurable electronic circuit further includes memory means for storing electronic information.
- 6. (Original) The invention of claim 1 wherein the configurable electronic circuit includes digital logic circuitry.
- 7. (Original) The invention of claim 1 further including a microprocessor means for executing an emulator program of instructions from the known electronic system subcomponent.
- 8. (Currently Amended) A method of configuring an electronic circuit module to replicate emulate output signals from a known electronic circuit comprising:

determining operational functions and respective output signals of a known electronic system sub-component of an existing electronic master system;

developing a program on an external processor to replicate emulate desired functions of the known electronic system sub-component; and

loading the program onto a configurable electronic circuit that can be electronically connected to the electronic master system; and

determining the location of the configurable electronic circuit in the electronic master system using a configuration controller element electronically connectable with the configurable electronic circuit;

whereby the configurable electronic circuit has an output adaptable as an input to the electronic master system to replicate emulate and replace functions of the known electronic system sub-component acting in the electronic master system.

9. (Original) The invention of claim 8 wherein the configurable electronic circuit is included with a circuit board that can be electronically connected to the electronic master system.

- 10. (Original) The invention of claim 9 wherein the circuit board is removable from the electronic master system.
- 11. (New) The invention of claim 1 wherein the configurable electronic circuit includes a field programmable gate array (FPGA).
- 12. (New) The invention of claim 8 wherein the configurable electronic circuit includes a field programmable gate array (FPGA).